

# Volume XXV, THE SCIENCE TEACHER

## Index—February through December 1958

The annual index is designed to be functional and space-conserving. Listed alphabetically by authors, the individual articles are coded according to topic category in bold-face figures. The key to the codings appears at the bottom of each page. TST's editors will welcome reader reaction to this index format.

Adler, Leona K. *A Simple Demonstration of the Bacteriostatic Effect of Antibiotics*. May: 216. (4)  
Adler, Leona K. *Some Materials That Help Get the Idea Across*. March: 92. (4)  
Arnold, John G. *Development of an Undergraduate Research Program*. May: 202. (10)  
Barnes, Marie G. *Paraffin Models*. March: 92. (4)  
Bennett, Wendell F. *A Classroom Demonstration of a Series-Parallel Circuit*. April: 143. (4)  
Blackwood, Paul E. *Teaching Elementary Science to Gifted Children*. September: 262. (3) (7)  
Blanc, Sam S. *Guideposts in Science Education*. March: 82. (8) (10)  
Bliss, H. H. *The Science Involved in Rocketry*. December: 448. (6)  
Boeck, Clarence H. and Carr, Roman R. *An Orientation Exercise in Chemistry*. November: 411. (7)  
Bowlby, Walter D. *A Philosophical Critique of Chemistry Teaching*. May: 190. (5)  
Brandenburg, Robert L. *Teacher Demonstrations in Electricity*. May: 214. (4)  
Bray, Leo R.; Renner, John W.; and Powell, William. *Points and Counterpoint in Teaching Science*. May: 181. (10)  
Breedlove, Charles; Shugart, LeVan; and Smith, Alden. *A Science-Economics Workshop*. December: 451. (10)  
Brother H. Edwin, F.S.C.; Martin, Arnold M.; and Sister Joanna Marie, S.L. *Norms of the High School Chemistry Test, Form N*. February: 32. (6)  
Caldwell, Loren T. *Earth Sciences in the Ninth Grade*. October: 337. (10)  
Campbell, Jeptha E.; Diehl, T. Handley; and Thomas, Robert C. *High Temperature, Short Time Pasteurization of Milk*. November: 394. (4)  
Carr, Roman R. and Boeck, Clarence H. *An Orientation Exercise in Chemistry*. November: 411. (7)  
Connell, L. and James, W. W. *General Science Today*. October: 316. (10)  
Cooke, William Bridge and Heinlein, C. Leroy. *Micro-Fungi in the Soil*. February: 20. (4)  
Diehl, T. Handley and Setter, L. R. *Analysis of Radioactivity in Vegetation*. March: 77. (4)  
Diehl, T. Handley and Geilker, C. Don. *Determination of Half-Life*. December: 442. (4)  
Diehl, T. Handley; Thomas, Robert C.; and Campbell, Jeptha E. *High Temperature, Short Time Pasteurization of Milk*. November: 394. (4)  
Diehl, T. Handley and Setter, L. R. *Rainout Studies and Techniques*. March: 80. (4)  
Diehl, T. Handley, and Middleton, F. M. *Reducing Evaporation of Water by Use of Hexadecanol*. September: 254. (4)  
Dodd, Alan L. *Science Fiction in the Elementary School*. December: 463. (3) (7)  
Doty, Robert G. *Cure for Hard-to-Dry Glassware*. September: 276. (7)  
Durrell, John. *Student Seminar at Public Health Center*. September: 259. (9)  
*Fact Sheet on Satellites*. April: 136. (6)  
*Federal Support for Science Teaching*. September: 253. (6)  
Frank, Ruth. *Microprojection Method*. November: 402. (7)  
Geilker, C. Don and Diehl, T. Handley. *Determination of Half-Life*. December: 442. (4)  
Geldreich, Edwin E. and Heinlein, C. Leroy. *Culturing Bacteria on Membrane Filters*. October: 328. (4)  
Geldreich, Edwin E. and Heinlein, C. Leroy. *Pour Plate Technique*. February: 16. (4)  
Giovannangeli, Arthur J. *Pressure Areas in the Classroom*. May: 204. (7)  
Goldstein, Philip. *Concerning Ninth-Year Biology*. December: 454. (10)  
Gomba, Frank J. *Solving Problems by the Mole Method*. December: 465. (7)  
Graf, Elizabeth. *Gifted Sixth Graders Explore the Scientific World*. November: 374. (3)  
Hadlock, Eloise T. *This Is the Way We Do It*. September: 265. (7)  
Hage, M. K., Jr. *The Value of Failure*. November: 383. (3) (5)  
Hartker, Raymond L.; Tarzwell, Clarence M.; and Henderson, Croswell. *Basic Steps to Teaching Bioassay of Water*. April: (Part I) 130; (Part II) 133. (4)  
Heinlein, C. Leroy and Geldreich, Edwin E. *Culturing Bacteria on Membrane Filters*. October: 328. (4)  
Heinlein, C. Leroy, and Middleton, F. M. *How Scien-*

(1) Conservation (2) Education of Science Teachers (3) Elementary School Science (4) Experiments, Demonstrations, and Pupil Projects and Activities (5) History, Philosophy, Goals, and Objectives (6) Information for Science Teachers (7) Instructional Suggestions, Methods, and Materials (8) Investigations, Research, and Fact-Finding Studies (9) Science Clubs, Fairs, and Exhibits; Science Talent Searches (10) Science Course Content, Organization, and Curriculum

tists Recover and Study Small Amounts of Organic Pollutants in Water. May: 196. (4)

Heinlein, C. Leroy, and Cooke, William Bridge. Micro-Fungi in the Soil. February: 20. (4)

Heinlein, C. Leroy, and Geldreich, Edwin E. Pour Plate Technique. February: 16. (4)

Heinlein, C. Leroy, and Middleton, F. M. Separating Complex Substances by Chromatography. May: 192. (4)

Heiss, Elwood D. Helping Students Develop a Scientific Attitude. November: 371. (5)

Henderson, Croswell; Hartker, Raymond L.; and Tarzwell, Clarence M. Basic Steps to Teaching Bioassay of Water. April: (Part I) 130; (Part II) 133. (4)

Hollmeyer, Lewis H. Design for a Better Science Program. April: 127. (10)

IGY Committee, National Academy of Sciences. Ending Twelve Months at the Edge of Space. October: 311. (6)

IGY Committee, National Academy of Sciences. Earth-Probe Analysis. December: 434. (6)

James, W. S. and Connell, L. General Science Today. October: 316. (10)

Jaquiss, Robert S. Project Paper Drive. September: 274. (4)

Johnson, C. A. R. 3-D Models for Every Classroom. December: 467. (4)

Kelley, J. B. Visual Oxidation-Reduction Reactions. December: 439. (7)

Koepke, Charles III. What Qualities Must the Science Teacher Possess? November: 401. (5)

Lange, Erwin F. and Payne, K. E. Science Kits in Elementary Science Teaching. October: 321. (3)

Lesser, Milton S. Teaching Scientific Methods in Yeast Study. November: 377. (7)

Long, Robert H. Earth's Magnetic Field. December: 479. (4)

Maddux, Grace C. A Pro for the Planned Program. March: 72. (3)

Mallinson, George Greisen. The Textbook and Reading Difficulty in the Teaching of Science. December: 474. (8)

Martin, Arnold M.; Brother H. Edwin, F.S.C.; and Sister Joanna Marie, S.L. Norms of the High School Chemistry Test, Form N. February: 32. (6)

McClanahan, James Attison. The Use of Dry Ice in Heat Transfer Experiments. May: 215. (4)

McCurdy, Richard C. Toward a Population Literate in Science. November: 366. (5)

McKibben, Margaret J. A Look at British Secondary Science Education. April: 138. (6)

Merry, F. Archimedes' Principle—An Exception? May: 217. (4)

Middleton, F. M., and Heinlein, C. Leroy. How Scientists Recover and Study Small Amounts of Organic Pollutants in Water. May: 196. (4)

Middleton, F. M., and Heinlein, C. Leroy. Separating Complex Substances by Chromatography. May: 192. (4)

Middleton, F. M., and Diehl, T. Handley. Reducing Evaporation of Water by Use of Hexadecanol. September: 254. (4)

Moser, William Paul. Elementary Science Suggestions. May: 210. (3)

Munch, Theodore W. Secondary School Science Facilities: Recent Construction—How Effective? November: 398. (8)

Newell, Homer E., Jr. Rockets and Satellites in the IGY. May: 185. (6)

Nixon, Richard M. The VP on Science. September: 251. (6)

Novak, Benjamin J. School Community Activities for the Improvement of Science Teaching. November: 387. (7)

Payne, K. E. and Lange, Erwin F. Science Kits in Elementary Science Teaching. October: 321. (3)

Pengelley, Russell. A Plant Growth Experiment. April: 132. (4)

Petit, Cecil E. Making Chemistry Demonstrations Visual. April: 142. (7)

Phillips, L. W. Aberrations in Discussions of Newton's Laws. December: 444. (10)

Powell, William; Renner, John W., and Bray, Leo R. Points and Counterpoint in Teaching Science. May: 181. (10)

Pressler, Audrey E. Bacteria That Make Life Possible. October: 309. (10)

Owens, C. W. Securing Free Materials. September: 276. (7)

Read, Albert J. Teaching Aids in Astronomy. November: 402. (4)

Renner, John W.; Bray, Leo R.; and Powell, William. Points and Counterpoint in Teaching Science. May: 181. (10)

Reiner, William B. Testing and Evaluation in the Teaching of Science. October: 324. (8)

Roller, Duane H. D. How Can We Use the Knowledge of Current Science? September: 244. (5)

Sawyer, Wallace W. What About Science is Important to Teach? December: 430. (5)

Schafer, Donald A. Advanced Science for Gifted Students. September: 269. (10)

Scott, Sumner T. Extending the Science Curriculum. December: 458. (10)

Setter, L. R. and Diehl, T. Handley. Analysis of Radioactivity in Vegetation. March: 77. (4)

Setter, L. R. and Diehl, T. Handley. Rainout Studies and Techniques. March: 80. (4)

Shapley, Alan H. To the Edge of Space: IGY Upper Atmosphere Studies. March: 69. (6)

Shugart, LeVan; Breedlove, Charles; and Smith, Alden.

(1) Conservation (2) Education of Science Teachers (3) Elementary School Science (4) Experiments, Demonstrations, and Pupil Projects and Activities (5) History, Philosophy, Goals, and Objectives (6) Information for Science Teachers (7) Instructional Suggestions, Methods, and Materials (8) Investigations, Research, and Fact-Finding Studies (9) Science Clubs, Fairs, and Exhibits; Science Talent Searches (10) Science Course Content, Organization, and Curriculum

*A Science-Economics Workshop.* December: 451. (10)  
 Sister Joanna Marie, S.L.; Brother H. Edwin, F.S.C.; and Martin, Arnold M. *Norms of the High School Chemistry Test, Form N.* February: 32. (6)  
 Sister M. Clarice, O.P. *Assignments in the Study of the Invertebrates.* December: 478. (7)  
 Skibness, Edward J. *A Fool-proof Electroscope.* November: 404. (4)  
 Smith, Alden; Breedlove, Charles; and Shugart, LeVan. *A Science-Economics Workshop.* December: 451. (10)  
 Smith, David T. *Demonstration Experiment on Parallel Forces.* September: 277. (4) (7)  
 Smith, Herbert A. *The Educational Film in the Teaching of Science.* September: 282. (8)  
 Sprecher, Roland O. *A Demonstration Lens.* December: 470. (4)  
 Stefaniak, Edward W. *Functional Scientific Method.* May: 206. (5)  
 Sutton, Richard M. *The Jay-Walker's Equation.* October: 304. (7)  
 Tannenbaum, Harold E. *How Is Your Stock of Experts?* October: 333. (7)  
 Tarzwell, Clarence M.; Hartker, Raymond L.; and Henderson, Croswell. *Basic Steps to Teaching Bioassay of Water.* April: (Part I) 130; (Part II) 133. (4)  
 Thomas, Robert C.; Diehl, T. Handley; and Campbell, Jeptha E. *High Temperature, Short Time Pasteurization of Milk.* November: 394. (4)  
 Toll, John S. *Recent Developments in Physics.* February: 25. (6) (10)  
 Tuominen, William O. *Sprouting for Sprouts.* May: 212. (3)  
 Van Evera, B. D. *Definitions, Didactics and Deliberations.* April: 125. (5)  
 Westmeyer, Paul. *Teaching the Average Student.* December: 460. (10)  
 Woodburn, John H. *New Directions for Science Education Research.* April: 137. (8)  
 Yanowski, Barbara. *Teaching Science By Means of Television.* November: 406. (8)  
 Zim, Herbert S. *Where is the Science in Science Education?* February: 13. (10)

#### NSTA Activities

*AAAS Meeting.* October: 351.  
*B-I Section Officers.* September: 292.  
*Board Meeting.* February: 43 (special meeting). September: 291.  
*CCSSO Conference.* November: 417.  
*Chemistry.* March: 102 (films). April: 150 (tests).  
*Constitution Revised.* February: 43.  
*Convention.* March: 88. September: 279. October: 351. December: 481.  
*Debt Reduction Progress.* November: 417.  
*Election.* February: 39 (1958-59 nominees). April: 144 (officers and directors for 1958-59). October: 351.

*Elementary Science Conference.* May: 229.  
*Life Members.* May: 209.  
*NEA Building Dedication.* December: 481.  
*News Flash.* November: 417 (conference on facilities).  
*NSTA Testifies.* April: 150.  
*Safety in Science.* March: 102.  
*Secondary Science Teaching.* December: 481.  
*Schedule of Meetings.* May: 229. April: 150. September: 291.  
*Science-Social Studies Workshop.* February: 23.  
*Staff Changes.* September: 291.  
*STAR '58 Awards.* April: 146.

#### FSA Activities

*Administrative Committee.* March: 106. May: 230.  
*Conference Reports.* October: 353.  
*FSAF Sponsors.* February: 44. May: 230. September: 294. December: 482.  
*Military Service.* April: 153.  
*On-the-Job Research Grants.* March: 106. September: 294. December: 482.  
*PASS Conference.* December: 482.  
*1958-59 Programs.* September: 294.  
*Publications.* October: 353.  
*Registry of U. S. Science Teachers.* October: 353.  
*Science Achievement Awards for Students.* February: 44. May: 220 (1958 Winners); 230. September: 295.  
*Summer Research Assistantships.* April: 153. March: 86.  
*West Coast Conference.* March: 106.



HECTOR SAYS:

The Executive Secretary and staff told me they had a new publication ready to announce. In getting ready for this issue, I just put everything here in the bag. I hope I can find it.